QC ABSTRACT

NAME OF WORK: "Construction of Swimming Pool at Amrutha Nagara Byatarayanapura Ward No.07"

SL NO	Item Of Work	Name of Test	Frequency of Test/Quantity	Executed Quantity	Number of Tests Required	Number of Tests Conducted
		Materials				
1	Cement	Fineness by dry sieving	One Test		1	1
		Finess by Air permeablity method	One Test		1	1
		Density	One Test		1	1
		Standard Consistency	One Test		1	1
		Initial Setting time	One Test		1	1
		Final Setting time	One Test		1	1
		Soundness (Le Chatelier's Method)	One Test		1	1
		Compressive Strength	One Test		1	1
2	Coarse aggregate(40 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
3	Coarse aggregate(20 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
		Aggregate crushing Value	One Test		1	1
		Aggregate Impact Value	One Test		1	1
4	Fine aggregate	SIEVE ANALYSIS	One Test		1	1
		Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
5	Steel	Bend test	One Test		1	1
		Tensile Test	One Test		1	1
		Yield Test	One Test		1	1
		ReBend test	One Test		1	1
6	Block(400*200*200)	BLOCK DENSITY	One Test		1	1
		WATER ABSORPTION	One Test		1	1
		DIMENSION ANALYSIS	One Test		1	1
		COMPRESSIVE STRENGTH	One Test		1	1
7	Block(400*100*200)	BLOCK DENSITY	One Test		1	1
		WATER ABSORPTION	One Test		1	1
		DIMENSION ANALYSIS	One Test		1	1
		COMPRESSIVE STRENGTH	One Test		1	1
8	RCC(M20)	Compressive Strength(7days and 28days)	2 set /6-15 cum	7.93	4	4
9	RCC(M25)	Compressive Strength(7days and 28days)	12 set /150-200 cum	181.46	24	24

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10	CERAMIC TILES	MEASUREMENTS OF LENGTH, WIDTH AND THICKNESS	One Test		1	1
		MODULUS OF RUPTURE AND BREAKING STRENGTH	One Test		1	1
11	Mortar Sand	Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
		Compacted Bulk Density	One Test		1	1
		Loose Bulk Density	One Test		1	1
		SIEVE ANALYSIS	One Test		1	1
12	Plaster Sand	Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
		SIEVE ANALYSIS	One Test		1	1

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TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID	:	**CP-2020-11-18-26** **Date: 25-07-19**
Project Name	:	"Construction of Swimming Pool at Amrutha Nagara Byatarayanapura Ward No.07"
Agency	:	Sri.K.Somappa, No.139/A, 6th Main Mathikere, Bangalore-560054
Customer's Reference	:	EE(Project)/Ynk Zone/WO/12/18-19
Date of Receipt	:	22-07-19
Sample Type	:	Birla Super 53grade
Reference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 (Part 1,2 3,4,5, 6,11):1988 IS 4031 Part 1 DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4 IS 4031 Part 2, Determination of Fineness by Blaine Air Permeability Method, Clause 5 IS 4031 Part 3, Determination of Soundness, Clause 5,Clause 6 IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 5, Determination of Initial & Final Setting Time, Clause 5 IS 4031 Part 11,DETERMINATION OF DENSITY , Clause 6
Date of test	:	23-07-19
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	Fineness by dry sieving (%)	1.85	–
2	Finess by Air permeablity method (m^2/kg,Min)	348.7	225m^2/kg, Min
3	Density (gm/cc)	3.14	–
4	Standard Consistency (%)	28.5%	Not specified
5	Initial Setting time	135 minutes	Not less than 30 minutes
6	Final Setting time	245 minutes	Not more than 600 minutes
7	Soundness (Le Chatelier's Method)	1.5mm	Not more than 10 mm

* The results obtained are satisfactory as per standard requirements.

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TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID	:	**CP-2020-11-18-26**	**Date: 20-08-19**
Project Name	:	"Construction of Swimming Pool at Amrutha Nagara Byatarayanapura Ward No.07"	
Agency	:	Sri.K.Somappa, No.139/A, 6th Main Mathikere, Bangalore-560054	
Customer's Reference	:	EE(Project)/Ynk Zone/WO/12/18-19	
Date of Receipt	:	22-07-19	
Sample Type	:	Birla Super 53grade	
Reference to BIS codes	:	IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 6, Determination of Compressive Strength, Clause 6	
Date of test	:	23-07-19	
Environmental Conditions during test	:	Temperature: Humidity:	26°C 72%

Compressive Strength

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	3 Days	28.5N/mm^2	Not less than 27 N/mm^2
2	7 Days	39.0N/mm^2	Not less than 37 N/mm^2
3	28 Days	58.5N/mm^2	Not less than 53 N/mm^2

* The results obtained are satisfactory as per standard requirements.

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TEST REPORT ON COARSE AGGREGATES

Lab ID : **CP-2020-11-18-26** **Date: 25-07-19**

Project Name : "Construction of Swimming Pool at Amrutha Nagara Byatarayanapura Ward No.07"

Agency : Sri.K.Somappa, No.139/A, 6th Main Mathikere, Bangalore-560054

Customer's Reference : EE(Project)/Ynk Zone/WO/12/18-19

Date of Receipt : 22-07-19

Sample Type : 40mm down size coarse aggregate

Reference to BIS codes : IS: 383:2016 (Specification for Coarse and fine Aggregates)
IS: 2386 :1963(Part - 1,3,4) RA2011
IS 2386 Part 1: Particle Size and Shape
IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption
IS 2386 Part 4: Mechanical Properties

Date of test : 22-07-19

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:

Total weight taken : **15000** **grams**

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	80 mm	0	0	0.0	100	100
2	40 mm	215	215	1.4	98.6	90-100
3	20 mm	7455	7670	51.1	48.9	30-70
4	10 mm	4266	11936	79.6	20.4	10-35
5	4.75 mm	2844	14780	98.5	1.5	0-5
6	Pan	220	15000	100.0	0	---

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TEST REPORT ON COARSE AGGREGATES

Lab ID : **CP-2020-11-18-26** **Date: 25-07-19**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	11.9	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	12.4	
3	Specific Gravity	2.64	_
4	Bulk Density(Loose) (Kg/l)	1.43	_
5	Bulk Density(Compacted) (Kg/l)	1.47	_
6	Water Absorption(%)	0.24	_

* The results obtained are satisfactory as per standard requirements.

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TEST REPORT ON COARSE AGGREGATES

Lab ID	:	**CP-2020-11-18-26** **Date: 25-07-19**
Project Name	:	"Construction of Swimming Pool at Amrutha Nagara Byatarayanapura Ward No.07"
Agency	:	Sri.K.Somappa, No.139/A, 6th Main Mathikere, Bangalore-560054
Customer Reference	:	EE(Project)/Ynk Zone/WO/12/18-19
Date of Receipt	:	22-07-19
Sample Type/ Size	:	20mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2011 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	22-07-19

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:

Total weight taken : 5000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	40 mm	0	0	0	100	100
2	20 mm	225	225	4.5	95.5	90-100
3	10 mm	2845	3070	61.4	38.6	25-55
4	4.75 mm	1745	4815	96.3	3.7	0-10
5	Pan	185	5000	100	0	_

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TEST REPORT ON COARSE AGGREGATES

Lab ID : **CP-2020-11-18-26** **Date: 25-07-19**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS:383-2016
1	Flakiness Index(%)	13.2	Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate
2	Elongation Index(%)	10.3	
3	Specific Gravity	2.68	–
4	Bulk Density(Loose) (Kg/l)	1.43	–
5	Bulk Density(Compacted) (Kg/l)	1.49	–
6	Water Absorption(%)	0.24	–
7	Aggregate crushing Value(%)	22.9	Max 30% for Aggregates to be used in concrete for wearing Surface, In case Aggregate Crushing Value Exceeds 30% then the test for ten percent fines should be conducted for Aggregates to be used in concrete other than for wearing Surface.
8	Aggregate Impact Value(%)	23.7	30% for Aggregates to be used in concrete for wearing Surface, 45% for Aggregates to be used in concrete other than for wearing Surface.

* The results obtained are satisfactory as per standard requirements.

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TEST REPORT OF FINE AGGREGATE

Lab ID : **CP-2020-11-18-26** **Date: 25-07-19**

Project Name : "Construction of Swimming Pool at Amrutha Nagara Byatarayanapura Ward No.07"

Agency : Sri.K.Somappa, No.139/A, 6th Main Mathikere, Bangalore-560054

Customer's Reference : EE(Project)/Ynk Zone/WO/12/18-19

Date of Receipt : 22-07-19

Sample Type : Fine Aggregate

Reference to BIS codes : IS 383 : 2016 (Specification for Coarse and fine Aggregates)
IS: 2386 :1963(Part - 1, 3) RA2012
IS 2386 Part 1: Particle Size and Shape
IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption

Date of test : 22-07-19

Total weight taken : 1000 grams

Sl.no	Sieve Size	Weight Retained (gms)	Cumulative Weight Retained (gms)	% Cumulative Weight Retained	% Passing	Requirement as per IS 383:2016			
						Grading Zone I	Grading Zone II	Grading Zone III	Grading Zone IV
1	10 mm	0	0	0.0	100.0	100	100	100	100
2	4.75 mm	27	27	2.7	97.3	90-100	90-100	90-100	95-100
3	2.36 mm	55	82	8.2	91.8	60-95	75-100	85-100	95-100
4	1.18 mm	239	321	32.1	67.9	30-70	55-90	75-100	90-100
5	600 micron	205	526	52.6	47.4	15-34	35-59	60-79	80-100
6	300 micron	203	729	72.9	27.1	5-20	8-30	12-40	15-50
7	150 micron	191	920	92.0	8.0	0-10	0-10	0-10	0-15
8	Pan	80	1000	100.0	0.0	---	---	---	---

Result :The tested Sample Conforms to Grading Zone II

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TEST REPORT OF FINE AGGREGATE

Lab ID : **CP-2020-11-18-26** **Date: 25-07-19**

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS 383:2016
1	Water Absorption(%)	1.5	–
2	Specific Gravity	2.59	–
3	Material finer than 75 micron(%)	6.9	Uncrushed fine Aggregate Max 3%, Crushed Fine aggregate Max 15%, Mixed Fine aggregate Max 12%, Manufactured Fine aggregate Max 10%

* The results obtained are satisfactory as per standard requirements.

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TEST REPORT ON PHYSICAL REQUIREMENTS OF SOLID CONCRETE BLOCKS

Lab ID	:	**CP-2020-11-18-26** **Date: 27-08-19**
Project Name	:	"Construction of Swimming Pool at Amrutha Nagara Byatarayanapura Ward No.07"
Agency	:	Sri.K.Somappa, No.139/A, 6th Main Mathikere, Bangalore-560054
Customer's Reference	:	EE(Project)/Ynk Zone/WO/12/18-19
Date of Receipt	:	24-08-19
Sample Type/Size	:	Solid concrete blocks size (400X200X200)mm
Reference to BIS codes	:	IS : 2185 (Part 1) : 2005(RA 2010) Concrete Masonry Specification Part 1:Hollow and Solid Concrete Blocks (Dimensions -Annex-B, Clause 9.2 and 10 , Block density Annex -C Clause 9.3 and10, Compressive strength Annex -D Clause 9.4 and 10, Water absorption Annex -E Clause 9.5 and 10)
Date of test	:	24-08-19

BLOCK DENSITY:

Sl. No.	Measurement of overall Dimensions of Individual Blocks			Overall Volume of the Block in Cubic Centimetres	Weight of Oven Dried Block in Kilograms to the nearest 10 Gram	Block Density in Kg/cum*10^6	Avg.Block Density in (Kg/cum)	As per IS 2185(Part 1) :2005 (RA 2010)
	Length	Breadth	Height					
	mm	mm	mm	(Cm^3)	Kg	Kg/m^3	Kg/m^3	
1	401	198	199	15800	31.923	2020.4	2016.7	Not less than 1800Kg/m^3
2	400	199	201	16000	32.019	2001.2		
3	398	202	198	15918	32.290	2028.5		

WATER ABSORPTION:

Sl. No.	Wet weight after water absorption	Dry weight (Oven dry)	Water Absorption	Avg.Water Absorption	As per IS 2185(Part 1):2005 (RA 2010)
	kg	kg	%	%	
1	33.91	32.25	4.89	4.25	Shall not be more than 10% by mass
2	33.57	32.14	4.28		
3	33.44	32.24	3.59		

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Lab ID : **CP-2020-11-18-26** **Date: 27-08-19**

DIMENSION ANALYSIS

Sl.no	Length mm	Breadth mm	Height mm	Requirement as per IS 2185(Part 1):2005
1	401	202	200	
2	401	203	202	
3	399	203	201	
4	404	201	199	
5	403	200	201	
6	400	203	202	
7	402	202	202	
8	400	200	201	
9	403	201	201	
10	403	200	199	
11	401	199	203	**Length : ± 5mm** **Breadth : ± 3mm** **Height : ± 3mm**
12	401	202	202	
13	399	203	203	
14	401	200	199	
15	402	201	199	
16	402	200	202	
17	403	199	203	
18	402	202	200	
19	402	202	200	
20	401	199	199	
Average of 20	**402**	**201**	**201**	

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Lab ID : CP-2020-11-18-26 Date: 27-08-19

COMPRESSIVE STRENGTH:

Sl. No.	Size of solid block		Area	Failure Load	Compressive strength	Average Compressive strength
	Length	Breadth				
	mm	mm	(mm^2)	(KN)	N/mm^2	(N/mm^2)
1	400	202	80680	360.6	4.5	4.4
2	401	203	81305	353.0	4.3	
3	399	203	80973	357.3	4.4	
4	404	201	81117	357.0	4.4	
5	403	200	80443	356.4	4.4	
6	400	203	80987	352.3	4.3	
7	402	202	81300	355.6	4.4	
8	400	200	80040	356.5	4.5	

As per IS Requirements (Table 2, Clause 5.1, 5.2 and 9.4)

Compressive strength		
Grade	**Minimum average**	**Minimum Individual units.**
C (5.0)	5.00 N/mm^2	4.00 N/mm^2
C (4.0)	4.00 N/mm^2	3.20 N/mm^2

* The results obtained are satisfactory as per standard requirements.

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TEST REPORT ON PHYSICAL REQUIREMENTS OF SOLID CONCRETE BLOCKS

Lab ID	:	**CP-2020-11-18-26** **Date: 27-08-19**
Project Name	:	"Construction of Swimming Pool at Amrutha Nagara Byatarayanapura Ward No.07"
Agency	:	Sri.K.Somappa, No.139/A, 6th Main Mathikere, Bangalore-560054
Customer's Reference	:	EE(Project)/Ynk Zone/WO/12/18-19
Date of Receipt	:	24-08-19
Sample Type/Size	:	Solid concrete blocks size (400X100X200)mm
Reference to BIS codes	:	IS : 2185 (Part 1) : 2005(RA 2010) Concrete Masonry Specification Part 1:Hollow and Solid Concrete Blocks (Dimensions -Annex-B, Clause 9.2 and 10 , Block density Annex -C Clause 9.3 and10, Compressive strength Annex -D Clause 9.4 and 10, Water absorption Annex -E Clause 9.5 and 10)
Date of test	:	24-08-19

BLOCK DENSITY:

Sl. No.	Measurement of overall Dimensions of Individual Blocks			Overall Volume of the Block in Cubic Centimetres	Weight of Oven Dried Block in Kilograms to the nearest 10 Gram	Block Density in Kg/cum*10^6	Avg.Block Density in (Kg/cum)	As per IS 2185(Part 1) :2005 (RA 2010)
	Length	Breadth	Height					
	mm	mm	mm	(Cm^3)	Kg	Kg/m^3	Kg/m^3	
1	399	103	201	8260	33.037	3999.3	4061.1	Not less than 1800Kg/m^3
2	400	100	202	8080	33.507	4146.9		
3	399	102	199	8099	32.697	4037.2		

WATER ABSORPTION:

Sl. No.	Wet weight after water absorption	Dry weight (Oven dry)	Water Absorption	Avg.Water Absorption	As per IS 2185(Part 1):2005 (RA 2010)
	kg	kg	%	%	
1	33.91	32.25	4.89	4.25	Shall not be more than 10% by mass
2	33.57	32.14	4.28		
3	33.44	32.24	3.59		

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Lab ID : **CP-2020-11-18-26** **Date: 27-08-19**

DIMENSION ANALYSIS

Sl.no	Length mm	Breadth mm	Height mm	Requirement as per IS 2185(Part 1):2005
1	402	103	203	**Length : ± 5mm** **Breadth : ± 3mm** **Height : ± 3mm**
2	403	102	199	
3	400	101	201	
4	400	103	199	
5	404	102	200	
6	399	101	200	
7	404	100	201	
8	401	101	199	
9	402	101	203	
10	399	103	199	
11	400	102	200	
12	403	101	199	
13	402	100	201	
14	401	102	201	
15	401	100	199	
16	402	102	203	
17	401	100	200	
18	404	102	199	
19	400	99	202	
20	402	102	200	
Average of 20	**401**	**101**	**200**	

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Lab ID : **CP-2020-11-18-26** **Date: 27-08-19**

COMPRESSIVE STRENGTH:

Sl. No.	Size of solid block		Area	Failure Load	Compressive strength	Average Compressive strength
	Length	Breadth				
	mm	mm	(mm^2)	(KN)	N/mm^2	(N/mm^2)
1	400	103	41017	183.4	4.5	4.6
2	403	102	40908	182.3	4.5	
3	400	101	40179	190.4	4.7	
4	400	103	41099	188.7	4.6	
5	404	102	41209	188.7	4.6	
6	399	101	40372	186.3	4.6	
7	404	100	40533	183.2	4.5	
8	401	101	40273	188.1	4.7	

As per IS Requirements (Table 2, Clause 5.1, 5.2 and 9.4)

Compressive strength		
Grade	**Minimum average**	**Minimum Individual units.**
C (5.0)	5.00 N/mm^2	4.00 N/mm^2
C (4.0)	4.00 N/mm^2	3.20 N/mm^2

* The results obtained are satisfactory as per standard requirements.

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TEST RESULTS OF STEEL

Lab ID : **CP-2020-11-18-26** **Date: 23-07-19**

Project Name : "Construction of Swimming Pool at Amrutha Nagara Byatarayanapura Ward No.07"

Agency : Sri.K.Somappa, No.139/A, 6th Main Mathikere, Bangalore-560054

Customer's Reference : EE(Project)/Ynk Zone/WO/12/18-19

Date of Receipt : 22-07-19

Sample Type : Sunvik

Reference to BIS codes : IS 1786-2008, IS:1608-2005(RA 2011), IS 1599-2012.

Date of test: : 22-07-19

Sl.No	Identification of sample	Grade of the sample	Diameter of the steel bar	Weight of the sample	Yield stress	Tensile strength	Elongation	Bend test	Rebend test
			(mm)	(kg/m)	(N/mm2)	(N/mm2)	(%)		
1	Sunvik	Fe500	8	0.391	512	652	20.0%	Satisfactory	Satisfactory
2	Sunvik	Fe500	10	0.616	528	672	20.0%	Satisfactory	Satisfactory
3	Sunvik	Fe500	12	0.888	544	668	20.0%	Satisfactory	Satisfactory
4	Sunvik	Fe500	16	1.581	572	674	19.0%	Satisfactory	Satisfactory
5	Sunvik	Fe500	20	2.476	584	693	19.0%	Satisfactory	Satisfactory
6	Sunvik	Fe500	25	3.472	597	712	18.0%	Satisfactory	Satisfactory
7	Sunvik	Fe500	32	6.31	597	720	18.0%	Satisfactory	Satisfactory

* The results obtained are satisfactory as per standard requirements.

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HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL |
GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES |

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TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : **CP-2020-11-18-26** **Date: 04/10/2019**

Project Name : "Construction of Swimming Pool at Amrutha Nagara Byatarayanapura Ward No.07"

Agency : Sri.K.Somappa, No.139/A, 6th Main Mathikere, Bangalore-560054

Customer's Reference : EE(Project)/Ynk Zone/WO/12/18-19

Date of Receipt : 30-09-19

Customer ID : Changing Room Lintel Concrete

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M25 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

Date of test : 04/10/2019

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Changing Room Lintel Concrete	M25	27/09/2019	04/10/2019	149.29 X 149.92 X 149.06	22382	**8.239**	523.5	23.4	22.6
2	Changing Room Lintel Concrete	M25	27/09/2019	04/10/2019	151.95 X 151.42 X 149.08	23009	**8.488**	514.4	22.4	
3	Changing Room Lintel Concrete	M25	27/09/2019	04/10/2019	149.24 X 149.28 X 149.47	22278	**8.165**	492.8	22.1	

* The results obtained are satisfactory as per standard requirements.

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TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : **CP-2020-11-18-26** **Date: 25/10/2019**

Project Name : "Construction of Swimming Pool at Amrutha Nagara Byatarayanapura Ward No.07"

Agency : Sri.K.Somappa, No.139/A, 6th Main Mathikere, Bangalore-560054

Customer's Reference : EE(Project)/Ynk Zone/WO/12/18-19

Date of Receipt : 30-09-19

Customer ID : Changing Room Lintel Concrete

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M25 / 28 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

Date of test : 25/10/2019

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	Changing Room Lintel Concrete	M25	27/09/2019	25/10/2019	149.53 X 151.64 X 149.78	22675	**8.786**	632.2	27.9	27.4
2	Changing Room Lintel Concrete	M25	27/09/2019	25/10/2019	150.59 X 151.14 X 149.76	22761	**8.575**	591.9	26.0	
3	Changing Room Lintel Concrete	M25	27/09/2019	25/10/2019	150.47 X 151.72 X 150.96	22830	**8.097**	643.0	28.2	

* The results obtained are satisfactory as per standard requirements.

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Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : **CP-2020-11-18-26** **Date: 09/10/2019**

Project Name : "Construction of Swimming Pool at Amrutha Nagara Byatarayanapura Ward No.07"

Agency : Sri.K.Somappa, No.139/A, 6th Main Mathikere, Bangalore-560054

Customer's Reference : EE(Project)/Ynk Zone/WO/12/18-19

Date of Receipt : 03-10-19

Customer ID : GF Changing Room Roof Concrete

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M25 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

Date of test : 08/10/2019

Sl. No.	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
1	GF Changing Room Roof Concrete	M25	01/10/2019	08/10/2019	151.01 X 149.83 X 151.26	22626	**8.239**	528.2	23.3	22.7
2	GF Changing Room Roof Concrete	M25	01/10/2019	08/10/2019	150.40 X 149.10 X 149.68	22425	**8.488**	507.3	22.6	
3	GF Changing Room Roof Concrete	M25	01/10/2019	08/10/2019	151.09 X 151.84 X 150.83	22941	**8.165**	508.2	22.2	

* The results obtained are satisfactory as per standard requirements.

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****End of Report****